

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

26

DATE: JAN 06 1988

SUBJECT: Comments on ACS RI/FS Draft Work Plan

FROM: Daniel M. Caplice
Remedial Project Manager*DM Caplice*
1/6/88

TO: Karen Waldvogel

I have reviewed the Draft Work Plan for the ACS site which was completed for the PRPs by Warzyn Engineering. As part of my review, I have assumed that this document will stand alone when finalized. Therefore, I have not compared this document to the Work Plan prepared by our consultant, Roy F. Weston.

Overall, the work plan was well thought out and arranged. The phased approach that Warzyn has adopted will result in a more efficient use of resources without adversely affecting the RI/FS objectives or final reports. Specifically, I have the following comments:

1. The definition of on-site versus off-site needs to be clearly spelled out early and then closely followed throughout. Currently, the definitions seem ambiguous and have a tendency to change from section to section.
2. Pg. ES-1, par. 2: The objective of the RI/FS should be to evaluate the nature and extent of contamination. The contaminants may be either on-site, or they may have migrated off-site.
3. Pg. ES-2, par. 2: Twelve months for the FS after the end of the RI is too long, especially, in lieu of the fact that the FS begins before the RI is completed.
4. Pg. 1-4: The wording of the work plan should always be consistent. This applies not only between various sections and subsections, but also for the report as a whole. The last sentence refers to the seventh section, however no seventh section is included in the Table of Contents, or in this work plan.
5. Pg. 2-2, par. 3: The natural surface water drainage pond noted to be west of the site is not shown in figure 4-1.
6. Pg. 2-7, par. 1: Include the date (or approximate date) of the Lake County sampling program.
7. Pg. 3-1, sec. 3.1: No mention is made of any attempt to identify on-site treatment technologies. These should not be excluded from consideration during the FS.

8. Pg. 3-3: The institutional factors evaluation should also consider the permanent reduction through mobility, toxicity, or volume (M,T or V) as required by Section 121 of SARA.
9. Pg. 3-4: The environmental and public health factors evaluation should also addresss the long and short term risks associated with implementing the specific alternative.
10. Pg. 3-4: The cost effectiveness evaluation states that a present worth method will be utilized for cost comparison purposes. Present worth comparisons will only yield useful results when the alternatives have equal life expectancies and don't need to be replaced, similar O&M schedules, and are comparable. If these conditions are not present, it may be necessary to utilize some other form of comparison to realistically evaluate the alternatives on the basis of cost.
11. Pg. 4-2, Task I.C.1: Where is the off-site containment area? This is not shown in figures 2-1 or 4-1 through 4-5. See also comment number 1.
12. Pg. 4-6, par. 1: Further discussion is necessary regarding the site elevation survey and the selection of grid points that will be used.
13. Pg. 4-6, sec. 4.1.3: The work plan should state specifically that the magnetometer will be used where technically feasible. In addition, other geophysical methods should be described if they are to be used as back up or replacement technologies to the magnetometer.
14. Pg. 4-7, sec. 4.1.6: Selection of remedial alternatives at this stage of the RI (Task 1) seems premature. This FS work is being conducted too early in the process. As a result, effort, time, and costs are likely to be incurred later in the FS to basically redo all of this work.
15. Pg. 4-7, par. last: The entire paragraph does not fit this section (4.1.7).
16. Pg. 4-9, par. 2: The number of monitoring wells sampled is the bare bones minimum. Perhaps some of the piezometers installed could also be sampled to ensure good characterization of contaminants necessary.
17. Pg. 4-10: During task 2, six monitoring wells will be installed and screened across the entire upper aquifer (about 20 feet). This is probably too large a screen. Further discussion regarding the

advantages and disadvantages of the large screen should be required either in this work plan or in the Site Sampling Plan before these screens are approved for use.

18. Pg. 4-10, sentence - last: Six off-site monitoring wells are stated, however, figure 4-2 shows only 6 on-site wells. (See also comments number 1 and 4.)
19. Pg. 4-12, par. 1: The "eleven paris" [sic] of surface water and sediment samples as described, are not consistent with those as shown on Figure 4-3. (See also comments 1 and 4.)
20. Pg. 4-15, par. 1: Further discussion of "RCRA tests on some samples" is necessary.
21. Pg. 4-18, par. 1: This paragraph refers to a summary of the sampling effort as contained in Table 4-2. That table is not clear and as a result, it becomes essentially useless as a summary.
22. Pg. 5-1, par. last: See comment 7.
23. Pg. 5-2, 1st bullet: See comment 7.
24. Pg. 5-4, sec. 5.2.2.1: An additional goal should be to reduce M_xT or V .
25. Pg. 5-5, sec. 5.2.2.2: Even though ground water is the primary factor of concern, the public health screening should also evaluate advisories and standards for other potential factors which may be of concern.
26. Sec. 5.2: The screening must consider and address all of the following items: 1) the contaminant of concern, 2) the concentrations of the contaminants, 3) the extent of the spread of the contaminants, 4) the characteristics of the contaminants, 5) potential pathways and receptors, and 6) acceptable concentrations of the contaminants. Currently this section as well as table 5-1, are not clear with respect to these issues.
27. Pg. 5-6, par. 3: For a comparison of costs, the use of a ratio of capital costs to O&M costs is not advised. This method is not an acceptable method of cost evaluation. A comparison based on annualized costs or a net present value comparison would provide more useful information. (See also comment 10.)
28. FS General: "This memorandum will be submitted for Agency information." Further explanation as to the precise meaning of this sentence is necessary. What is the Agency's responsibilities and rights with respect to these memorandums?

29. Pg. 5-11, sec. 5.4.2: This section needs expansion in order to clearly state what sort of criteria will be used to determine cost effectiveness. (See also comments 10 and 27.)
30. Pg. 5-17, sec. 5.9.1: The content of the progress reports is defined in the Consent Decree. This section should be cross-checked against the appropriate section(s) in the Decree to assure consistency.
31. Pg. 6-1: The time frames as shown here are not consistent with those as outlined in the executive summary. (See also comment 4.)
32. Table 4-1: This table, and the numbers within, are not consistent with the respective figures or text. For example, figure 4-4 shows 10 locations for sediment and surface water sampling while this table states that there are 11 locations. (See also comment 4.)
33. Table 4-1: The number of private wells is not specified in the text and tentative or possible locations of those wells are not identified on any figure.
34. Table 4-1: According to this table, only 4 out of 8 leachate wells will be sampled. What is the purpose of the other 4 that are not sampled?
35. Table 4-1: The numbers listed for geotechnical, geotechnical subtotal, and chemical subtotal do not make sense. The reason for those last three entries is not clear.
36. Table 4-2: This table is not consistent with the figures and is also inconsistent with the text. Additionally, it is neither clear nor easy to follow and understand. (See also comments 4, 21, and 32 through 34.)
37. Table 4-4: A comparison of this table to the respective figure and text shows the following: 1) there will be only 2 samples collected per waste pit, 2) there will be only 2 samples collected per waste boring, 3) there will only be 1 sample collected per soil area, 4) there will be only 2 samples collected per soil boring, and 5) no blank samples will be analyzed. Unless the PRP consultant can provide further justification for this lack of analysis, I would not be able to approve this plan because it would probably not provide adequate information to characterize the site.
38. Table 5-1: See comments 22 through 30.
39. Figures: The figures should show outlines of any permanent structures. These may impact the location of work to be conducted. Currently, no structures are identified.

40. Fig. 2-1: The text refers to six monitoring wells, yet this figure, as well as the subsequent figures, show only 3 monitoring wells. However, there are also 3 test wells identified. Clearly state the difference or adopt one uniform manner of referring to the old wells.
41. Fig. 4-1: The legend does not contain a symbol for monitoring wells. (See also comment 40.)
42. Figures: The general base figure used does not show the following, all of which should be included: 1) permanent on-site structures, 2) the marshes to the east and west of the ACS property, 3) and the marsh north of the Grand Trunk tracks. All of these are identified in the text and should be included.
43. Fig. 4-1: A comparison of this figure with the text reveals that a surface water point is proposed for the center of the Griffith Landfill. Why is there surface water on top of a closed portion of the landfill? Why wasn't this fact mentioned in the text?
44. Fig. 4-1: A comparison of this figure to the text also reveals the following: 1) there will only be 2 piezometers and one surface water point east of Colfax Avenue, 2) there is no investigative work planned east of the Kapica and the ACS property but south of the C&O railroad, and 3) no work is planned for the marsh north of the Grand Trunk tracks. Further explanation of these deficiencies is necessary.
45. Fig. 4-1: The drainage ditch designation should be identified in the legend.
46. Fig. 4-2: This figure should be combined with figure 4-1.
47. What are the differences between surface water points as shown in figure 4-1 and surface water sampling points as identified in figure 4-3.
48. Fig. 4-5: 1) What is the purpose of identifying a soil area? 2) Why is a soil area located immediately west of E while figure 4-4 shows a waste pit in that same location? 3) Are soil areas in reality surface soil samples? These questions need to be answered.
49. Fig. 6-1: Seven weeks for U.S. EPA review of documents is too long. These should mirror the time frames established in the consent decree, which I believe states 30 days.
50. Fig. 6-1: No submittals to the U.S. EPA are shown after Phase I or Phase II. Some sort of report summarizing the phase and recommending further action is necessary after both phases.

As I originally stated, I believe this Draft Work Plan was very well prepared. The comments I've noted should be easily addressed and incorporated into the final product. If you have any problems or questions related to my review, please contact me, otherwise I trust that you will forward my comments, along with yours and any others you have received, directly to the PRPs in a timely manner.

cc: C. Puchalski, ORC